

REMARKS

Applicants respectfully request entry of the foregoing amendments and reconsideration of the merits of the outstanding rejections in view of the following remarks. Claims 1-29 are currently pending.

I. Interview

At the outset, the undersigned thanks the Assistant and Primary Patent Examiners for the courtesies extended during the interview conducted on June 21, 2004.

II. Prior Art Rejections

Claims 1-13 and 22-29 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 5,727,159 to Kikinis. Claims 14-21 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Kikinis. Claims 24-26 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Kikinis in view of U.S. Patent No. 6,052,688 to Thorsen. Applicants respectfully traverse these rejections on the following grounds.

A. The Rejection of Claims 1-13 and 22-29

Independent claim 1 as currently amended is repeated as follows:

1. Apparatus comprising

retrieval means for retrieving a first set of data from a first predetermined data source, said first set of data including a second set of data;

analyzing means for analyzing semantics, syntax, or position of said second set of data within said first set of data; and

means for building an agent, said agent comprising instructions based on said analysis of said semantics, syntax, or position of said second set of data, wherein said instructions are to be used by said agent to subsequently retrieve a third set of data from said first predetermined data source and select a fourth set of data included in said third set of data.

Claim 1 is directed to an apparatus for building an agent, which can be subsequently executed to repeatedly and accurately retrieve changing content from the same location (as identified by the relative semantics, syntax, or position of the changing content) within a predetermined data source, *e.g.*, web page. The claimed invention is supported by the preferred embodiment(s) provided in the specification at least at paragraphs 42 through 70, which describes agent building in the context of HTML web pages. Particularly, once the URL of a target web page (predetermined data source) has been specified, text and HTML in the target page are downloaded (retrieved) and stored on a local machine. *See* paragraph 42. The target page is

then parsed by an agent builder to determine the structure of the target page. *See* paragraph 44. The syntax and structure are analyzed and decomposed by the agent builder and a parse tree is constructed. *Id.* The parse tree represents all of the major structural elements found in the target web page, using well-known semantics associated with HTML syntax. *Id.* The hierarchy of the original target page is determined, along with nodes that correspond to each structural element found in the target document. *Id.* Plain text, links, image references and all other web page components are related to the HTML syntax elements enclosing them in the target page definition and placed into the parse tree structure as elements of the tree. *Id.* The target content (second set of data) of the web page (first set of data) is selected by a user by, for example, identifying start and end market text for the target content. *See* paragraph 46. The start and end market text is used to identify an approximate, human readable location in the precise structure of the target web page that the agent builder can use as a starting point to determine the actual physical location of the target content within the web page structure and syntax. *See* paragraph 50. The agent builder searches the parse tree for a sequence of text-based content that matches the marker text. *See* paragraph 52. Once the market text is found in the target page, the structural location within the parse tree is stored. *See* paragraph 56. The agent builder proceeds to automatically generate the structural and statistical information of the target content based upon the parse tree hierarchy. *See* paragraphs 58 and 59. This structural and statistical information, *i.e.*, agent data, is used to identify the same location (fourth set of data) in future, changed versions of the target page (third set of data). *See id.* Thus, an agent is built based on an analysis of the desired content's semantics, syntax, or position vis-à-vis the overall target page data gathered in a previous retrieval. The results of this analysis allow the agent to accurately evaluate subsequent versions of the target page to retrieve a subset of content therein having similar relative semantics, syntax, or position as identified before. This allows the agent to repeatedly retrieve particular desired content (*e.g.*, news headlines) in a web page (*e.g.*, CNN.com) that varies in form, content, etc. as a function of time (*e.g.*, headlines in CNN.com change as news stories develop).

Kikinis merely teaches a system in which a proxy-server is provided for an end-device to translate information received from the Internet into a simplified format readily useable by the end-device, which is presumed to have limited processing and display capabilities. *See* Kikinis, abstract.

As stated in MPEP § 2143, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, as stated in MPEP § 2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). Finally, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Kikinis, either taken alone or with any of the other cited references, does not teach or suggest all of the limitations recited in independent claim 1. For example, Kikinis does not teach or suggest the recited “analyzing means for analyzing semantics, syntax, or position of said second set of data within said first set of data.” Kikinis’ proxy-server converts downloaded HTML web pages into “HT-Lite” pages for transfer to a hand-held device. *See* Kikinis, col. 10, lines 26-30. During this conversion, the proxy-server does not analyze the semantics, syntax, or position of a particular subset of data within (in relation to) the overall HTML page. It merely strips out unwanted or unnecessary data in the HTML page so that it can be transferred at lower bandwidths to resource limited devices. The proxy-server also does not analyze the “format” of a particular subset of data relative to the over HTML page, however this feature as recited in the previous version of claim 1 (*see* Reply of February 26, 2004) has been removed to give greater certainty to the claim. Moreover, Kikinis does not teach or suggest the recited “means for building an agent, said agent comprising instructions based on said analysis of said semantics, syntax, or position of said second set of data, wherein said instructions are to be used by said agent to subsequently retrieve a third set of data from said first predetermined data source and select a fourth set of data included in said third set of data.” As recited, the claimed means for

building builds an agent having instructions based upon an analysis of the semantics, syntax, or position of a particular set of data within a data source, *e.g.*, web page. This agent can then be used to subsequently retrieve additional data (*i.e.*, third set of data) and select a subset of data therein (*i.e.*, fourth set of data) from the very same predetermined data source, *e.g.*, web page. As remarked above, Kikinis' proxy-server does not analyze semantics, syntax, or position of a particular subset of data within and relative to the retrieved web page. Even assuming, *arguendo*, that the proxy-server inherently could or does automate certain tasks through the use of agents (as the Examiner contends), it does not build agents that retrieve data from web pages based upon an analysis of a previous version of that web page. This circular feature (*i.e.*, analyzing a web page and then returning to that web page at a later time to look for similar content based upon the prior analysis) is an unobvious difference missing from Kikinis. Therefore, Applicants contend that the rejection of claim 1 and all claims dependent therefrom (*i.e.*, claims 2-13, 24, and 27) is improper.

Kikinis further fails to teach or suggest "wherein said retrieval means, said analyzing means, and said means for building an agent all reside and execute on a single local computer device" as recited in claim 2. Emphasis added. Rather, Kikinis necessarily requires a proxy-server to convert the HTML web pages into HT-Lite for the end-device. *See id.*

Independent claim 22 is a process claim that recites similar, if not identical, functions as that defined in claim 1. Therefore, Applicants contend that the rejection of claim 22 and all claims dependent therefrom (*i.e.*, claims 23¹, 26, 28, and 29) is improper at least because of the reasoning remarked above with respect to claim 1.

Applicants respectfully request the Examiner to withdraw the instant rejection.

B. The Rejection of Claims 14-21

Independent claim 14 in currently amended form is repeated as follows.

14. Apparatus comprising:

retrieval means for retrieving a first set of data from a first predetermined data source and a second set of data from a second predetermined data source, said first set of data and said second set of data each being in any one of several possible formats;

¹ Claim 23 (previously independent) has been amended to depend on claim 22.

analyzing means for analyzing said first set of data to select a first subset of data included in said first set of data *based on a prior analysis of semantics, syntax, or position of said first subset of data included in a previous version of said first set of data*, and for analyzing said second set of data to select a second subset of data included in said second set of data *based on a prior analysis of semantics, syntax, or position of said second subset of data in a previous version of said second set of data*; and

means for displaying said first subset of data and said second subset of data on a display device, said means for displaying including means for reformatting said first subset of data and said second subset of data if necessary for display on said display device. (Emphasis added.)

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. *In re Sun*, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. *Id.*

Kikinis fails to disclose each and every limitation recited in independent claim 14. For example, Kikinis fails to disclose an “analyzing means for analyzing said first set of data to select a first subset of data included in said first set of data based on a prior analysis of semantics, syntax, or position of said first subset of data included in a previous version of said first set of data, and for analyzing said second set of data to select a second subset of data included in said second set of data based on a prior analysis of semantics, syntax, or position of said second subset of data in a previous version of said second set of data.” This limitation captures in-part the circular feature noted above (*e.g.*, analyzing a current version of a web page to select a subset of data therein based upon a prior analysis of the semantics, syntax, or position of said subset of data within a previous version of that web page), which is missing from Kikinis. *See Remarks § I.A, supra.* Therefore, Applicants contend that the rejection of independent claim 14 and all claims dependent therefrom (*i.e.*, claims 15-21 and 25) is improper.

Applicants respectfully request the Examiner to withdraw the instant rejection.

C. The Rejection of Claims 24-26

Claims 24-26 depend from either independent claim 1, 14, or 22. Thorsen is directed to a computer-implemented control of access to atomic data items. Thorsen, abstract. Thorsen does not cure the deficiencies of Kikinis noted with respect to independent claims 1, 14, and 22. *See Remarks § I.A and I.B, supra.* Applicants submit that the rejection of dependent claims 24-26 is improper and respectfully request the Examiner to withdraw the instant rejection.

III. Conclusion

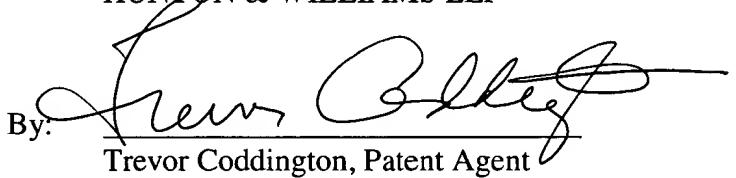
In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

No fee is believed to be necessary for entry and consideration of this Reply. In the event that the United States Patent & Trademark Office requires a fee to enter and consider the instant Reply or to maintain the application pending, please charge or credit such variance to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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